

### ABSTRACT

A clock system is disclosed for distributing and generating a digital clock signal for a plurality of electronic assemblies. The clock system includes a remote fixed-frequency clock for generating a first clock signal of a first frequency and a plurality of local clock modules. The local clock modules are respectively disposed on the plurality of electronic assemblies and each include synthesizer circuitry for creating a variable clock signal of a different frequency than the first frequency. Fanout circuitry is coupled between the remote fixed frequency clock and the plurality of local clock modules to distribute the first clock signal.

10